CLAIMS

1. A process for positioning an optical component (12) between two optical fibers (1, 2) furnished at their end with lenses (3, 4), characterized in that it consists in:

- drilling a support (6) in such a way as to fix therein a capillary tube (7) whose inside diameter is designed so as to slip an optical fiber thereinto,
- fixing the capillary tube (7) in the drilling (8) of the support (6),
- making a blind cut (10) of the support (6) and of the capillary tube (7), in such a way as to separate the capillary tube (7) into two parts (7a, 7b), a first plane face (11) of the cut (10) being perpendicular to a longitudinal axis (5) of the capillary tube (7),
- positioning the component (12) on the first plane face (11),
- positioning an optical fiber (1, 2) in each of the parts (7a, 7b).

2. The process as claimed in claim 1, characterized in that the positioning of the component (11) is carried out by marking the longitudinal axis (5) of the capillary tube (7) on the first plane face (11) of the cut (10), then by positioning the component (12) with respect to the mark thus defined.

3. The process as claimed in claim 2, characterized in that a second plane face (13) of the cut (10) forms an acute angle with the first plane face (11) of the cut (10) and in that the marking of the longitudinal axis (5) of the capillary tube (7) and the positioning of the component (12) with respect to the mark is done by visual observation using the second plane face (13) of the cut (10) as means of optical feedback.

4. The process as claimed in claim 2, characterized in that the capillary tube (7) is glued to the support (6) in such a way as together to form an optically homogeneous block, and in that the marking of the longitudinal axis (5) of the capillary tube (7) and the positioning of the component (12) with respect to the mark is done by visual observation along the longitudinal axis (5) of the capillary tube (7).

5. The process as claimed in one of the preceding claims, characterized in that each fiber (1, 2) is positioned translationally along the longitudinal axis (5) and rotationally about the longitudinal axis (5) so as to reduce to the maximum the optical losses due to a defect of alignment of the fibers (1, 2).

6. The process as claimed in one of the preceding claims, characterized in that the lenses (3, 4) focus a radiation which passes through them onto a Gaussian mode diameter of between 1 and 50 μm.

7. A device for positioning an optical component (12) between two optical fibers (1, 2) furnished at their end with lenses (3, 4), characterized in that it comprises a support (6) through which is fixed a capillary tube (7), the support (6) comprising a blind cut (10) so as to separate the capillary tube (7) into two parts (7a, 7b), in that the cut (10) comprises a first plane face (11) perpendicular to a longitudinal axis (5) of the capillary tube (7), and in that the component (12) is positioned on the first plane face (11).

8. The device as claimed in claim 7, characterized in that the cut comprises a second plane face (13) forming an acute angle with the first plane face.

9. The device as claimed in one of claims 7 or 8, characterized in that the capillary tube (7) is glued to the support (6) in such a way as together to form an optically homogeneous block.